

REMARKS

Claims 1-28 are currently pending. Claims 1 is cancelled. Claims 2-4, 12, and 27 are amended. No new matter has been added.

Specification

Paragraphs 2, 21 and 27 were objected to because of informalities. Substitute paragraphs have been provided incorporating the suggestions of the Examiner. Applicants respectfully request withdrawal of these objections.

Paragraphs describing the added Figure 7-10 are requested to be inserted between ¶15 and ¶ 17. No new matter has been added.

Substitute paragraph 44 has been provided to add corresponding item numbers to described features and reference to Figures 7 and 9 showing these already described features. No new matter has been added.

Drawings

The drawings are objected to under 37 C.F.R. § 1.83(a), specifying that the drawings must show every feature of the invention specified in the claims. More specifically, that “the working light with reflector [Claim 25], and with at least one LED and a shaped reflector [Claim 28] must be shown or the feature(s) canceled from the(s). The new drawings, Figures 7, 8, 9, and 10 show these features described in the specification at ¶ 0044 and Claims 25 and 28.

Further, replacement sheets for Figures 1-6 are also provided, changing the page numbering of the sheets.

The Applicant hereby declares that no new matter has been added in the content of the new drawings, Figures 1-10 for the above-identified application furnished herewith.

Claim Objections

Claim 4

Claim 4 has been objected to because of a typographical error, wherein “prove” should read as “provided.” *See* OA at 3, ¶3. Applicant thanks the Examiner for pointing out this error. Claim 4 is amended to change “prove” to “provide.”

Claim 3 and 12

Claims 3 and 12 are objected to because the “Applicant should positively recite the reference to which the angles are applied to avoid any uncertainties and indefiniteness. *See* OA at 3, ¶4. Claim 3 states, “A work light according to claim 2 wherein the axes of said two LEDs are at 8° to each other.” Claims 3 and 12 are amended to reflect the language supported in the specification at ¶ 22, whereby Claim 3 now states, “A work light according to claim 2 wherein the offset angle of said two LEDs are set to 8°.”

Similarly, Claim 12 states, “A work light according to claim 11 wherein said LEDs are tilted away from each other at 8 degrees.” Claim 12 is amended to also reflect the language supported in the specification at ¶ 22, whereby Claim 12 now states, “A work light according to claim 11 wherein said LEDs are tilted away from each other with an offset angle at 8 degrees.

Applicants respectfully request that the Examiner withdraw his objections to Claims 3 and 12 in view of the amendment.

Claim 21

Claim 21 is objected to because of the informality wherein claim 21 recites “a microcontroller.” *See* OA at 3, ¶5. Applicants thank the Examiner for pointing out this typographical error. Claim 21 is amended to recite “said microcontroller.” Applicants respectfully request that the Examiner withdraw his objections to claim 21 in view of the amendment.

Claim 22

Claim 22 is objected to because the limitation, “said microcontroller and momentary action switch” lacks antecedent basis. *See* OA at 3-4, ¶6. Claim 22 is amended to include “a momentary action switch,” and the antecedent basis for “said microcontroller” is found in claim

20. Applicants intend that claim 22 depend from claim 20. Applicants respectfully request that the Examiner withdraw his objections to claim 22 in view of the amendment.

Claim Rejections Based on 35 U.S.C. § 102.

Claims 1-2, and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by McDermott (U.S. Patent No. 5,782,553). Claim 28 is rejected under 35 U.S.C. § 103(b) as being anticipated by Ueda *et al.* (U.S. Publication 2002/0006039). *See* OA at 4-5, ¶¶7-11. Applicants respectfully disagree.

Claim 1

In particular, Claim 1 states the following: “A work light comprising at least two LEDs tilted away from each other to provide, in use, a high intensity beam pattern.” This claim is cancelled, therefore the rejection based on 35 U.S.C. § 102(b) is now moot.

Claim 2

Claim 2 recites, “A work light according to claim 1 wherein said two LEDs are tilted away from each other to provide an elliptical beam pattern.” Claim 2 is currently amended into independent claim form to now read as follows, “A work light comprising two LEDs that are tilted away from each other to provide a high intensity elliptical beam pattern.”

The OA rejected claim 2 as being anticipated by McDermott. More specifically, the OA states, “McDermott discloses the two LEDs being tilted away from each other to provide an elliptical beam pattern [Column 2, Line 65 – Column 3, Line 9; Column 7, Line 66- Column 8, Line 14; Claim 15].” *See* OA at 4, ¶ 9. Applicants respectfully disagree that McDermott anticipates claim 2. In particular, at Column 2, Line 65 – Column 3, Line 9, McDermott does not recite or teach an “elliptical beam pattern.” At Column 7, Line 66- Column 8, Line 14, McDermott also does not teach “two LEDs that are tilted away from each other to provide a high intensity beam pattern.” McDermott appears to teach use of an elliptical reflector in comparison to a hyperbolic shaped reflector, concluding that use of the hyperbolic reflector to be a better choice. Similarly, Claim 15 of McDermott teaches the shape of the reflector, not an “elliptical beam pattern.”

Further, the OA cited Figure 2 items L1 and L2 as “McDermott disclos[ing] a lighting device including at least two LEDs . . . tilted away from each other to provide, in use a high intensity beam pattern” with regard to claim 1. *See* OA at 4, ¶8. Since claim 2 depended from claim 1, though now it is amended to read as independent claim “to provide an elliptical beam pattern,” claim 2 is also not anticipated by McDermott in this particular regard. Applicants respectfully disagree with the OA because the invention disclosed by McDermott cannot physically provide an “elliptical beam pattern.”

First, Figure 2 is a “a diagrammatic cross-sectional view through line 2’-2” of FIG. 1 assembly.” *See* McDermott at 3:21-22. Figure 1 of McDermott shows 4 LEDs, not 2 LEDs as recited by the claim. Second, McDermott teaches away from the invention because in the embodiments shown by McDermott, four LEDs are shown with each 90° apart on an X-Y axis equidistant from the center. No amount of tilting of those LEDs in those positions will produce and “elliptical beam pattern.” Therefore, is a physical impossibility to form an elliptical beam of light using the configuration of LEDs as provided in the figures.

Therefore, McDermott does not anticipate claim 2 because it does not teach every element of claim 2. Applicants respectfully request that the rejection based on 35 U.S.C. § 102(b) be withdrawn, placing the claim in condition for allowance.

Claim 11

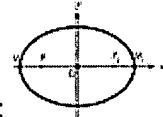
Claim 11 recites, “A work light comprising at least two LEDs tilted away from each other at an offset angle to each other to provide, in use, a high intensity elliptical beam.” The OA rejected claim 11 under 35 U.S.C. § 102(b) as being anticipated by McDermott, citing Figure 2: (L1 and L2) and the same citations for claim 2, “[Column 2, Line 65 – Column 3, Line 9; Column 7, Line 66- Column 8, Line 14; Claim 15].” For the same reasons stated above, none of the citations to McDermott teach an “elliptical beam pattern.” Therefore, McDermott does not anticipate claim 11. Applicants respectfully request that the rejection based on 35 U.S.C. § 102(b) be withdrawn, placing the claim in condition for allowance.

Claim 28

Claim 28 recites, “A work light comprising at least one LED and a shaped reflector to provide an elliptical beam.” The OA rejected claim 28 “under 35 U.S.C. § 102(b) as being

anticipated by Ueda *et al.* (US. Publication 2002/006039).” See OA at 5, ¶11. More specifically, the OA cites Figure 4 item 3 of Ueda *et al.* as proving an elliptical beam. Applicant respectfully disagrees that Ueda *et al.* teaches an elliptical beam. According to The American Heritage® Dictionary of the English Language, Fourth Edition (2000), an ellipse is “1. A plane curve, especially: a. A conic section whose plane is not parallel to the axis, base, or generatrix of the intersected cone. b. The locus of points for which the sum of the distances from each point to

two fixed points is equal.” emphasis added. The dictionary also provided a figure:



The meaning for the word “elliptical” provided by the Fourth Edition of the American Heritage Dictionary is “Resembling an ellipse in shape.” Applicants contend that the item 3 of Figure 4 of Ueda *et al.* is not an “elliptical beam.” Ueda *et al.* teaches away from an elliptical beam. Paragraph 41, which describes Figure 4 of Ueda *et al.*, teaches “the lights of the LEDs overlap on the focal line of the second focus F2 and form a longitudinal narrow illumination area having a constant width as shown in Fig. 4.” emphasis added. An “elliptical beam” would have an elliptical shape, “whose plane is not parallel to the axis, base or generatrix of the intersected cone,” whereas Ueda *et al.* discloses a beam with a “a longitudinal narrow illumination area having a constant width,” which is inapposite to the definition of an elliptical form. Therefore, Ueda *et al.* does not anticipate claim 28. Applicants respectfully request that the rejection based on 35 U.S.C. § 102(b) be withdrawn, placing the claim in condition for allowance.

Claim Rejections Based on 35 U.S.C. § 103

Claims 3-10, 12-27 have been rejected under 35 U.S.C. § 103(a). Applicants respectfully disagree with the rejections because a *prima facie* case for obviousness has not been established on the basis that not all elements are disclosed by the cited references.

Claim 3 and 12

Claim 3 recites as amended per the Examiner’s objections, “A work light according to claim 2 wherein the offset angle of said two LEDs are set to 8°.” Claim 12 recites as amended per the Examiner’s objections, “A work light according to claim 11 wherein said LEDs are tilted away from each other with an offset angle at 8 degrees.” The OA states that claims 3 and 12 are

unpatentable only over McDermott and it admits in the OA that McDermott “does not specifically teach . . . the two LEDs being offset or tilted away from each other by eight degrees.” Since claim 3 is dependent on claim 2 and claim 12 is dependent on 11, a *prima facie* case for obviousness has not been established because not all elements have been disclosed by McDermott. More specifically, the elements “elliptical beam” and “the offset angle of said two LEDs are set to 8°” for claim 3 are not disclosed by McDermott. Further, the elements of “elliptical beam” and “said LEDs are tilted away from each other with an offset angle at 8 degrees” for claim 12 are also not disclosed by McDermott. Therefore, Applicants respectfully request that these rejections be withdrawn, placing these claims in condition for allowance.

Claims 4-8 and 10

Claims 4-8 and 10 recite the following:

4. A work light according to claim 2 including an electronic circuit to provide a constant current to said LEDs independent of a supply voltage providing said current.
5. A work light according to claim 4 wherein said electronic circuit comprises a switching regulator.
6. A work light according to claim 5 wherein said electronic circuit includes a microcontroller to control said switching regulator.
7. A work light according to claim 4 wherein said current is provided by a plurality of nickel-metal-hydride batteries.
8. A work light according to claim 7 wherein said batteries comprise eight AA batteries.
10. A work light according to claim 6 wherein said current is provided by a fuel cell.

Claims 4-8 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McDermott as applied to claim 2 in further view of Selkee (U.S. Publication 2005/0018435). See OA at 6, ¶13. As previously established, McDermott does not teach all of the elements of claim 2. Since claims 4-8 and 10 depend from claim 2, for the same reasons, McDermott does not disclose the element of “elliptical beam” of claims 4-8 and 10. The OA has not established

that Selkee discloses an “elliptical beam.” Therefore, a *prima facie* case of obviousness has not been established because not all elements of the claims have been taught by the combined references. Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claim 9

Claim 9 recites: “A work light according to claim 4 wherein said current is controlled via a momentary action switch.”

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over McDermott as applied to Claim 4 and in further view of Krietzman (U.S. Publication 2002/0030994). *See* OA at 7, ¶16. According to the OA with regard to McDermott as applied to claim 4, “[McDermott] does not specifically teach an electronic circuit to provide a constant current to the LEDs independent of a supply voltage providing the current [re: Claim 4] (sic).” In addition, the OA has not established that Krietzman discloses the element of an “elliptical beam.” Therefore, a *prima facie* case of obviousness has not been established because not all elements of the claims have been taught by the combined references. Since claim 9 depends from claim 4, which in turn depends from claim 2, McDermott does not teach an “elliptical beam” and neither does Krietzman. Therefore, Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claim 27

Claim 27 recites as currently amended: “A work light according to claim 2 including a detachable magnetic hook member to facilitate hanging the work light from a suitable support.”

Claim 27 was rejected under 35 U.S.C. § 103(a) as being unpatentable over McDermott as applied to Claim 1 in further view of Ciallella *et al.* (U.S. Patent 5,213,412). Claim 27 is amended to depend from claim 2. The rejection as based on claim 1 is now moot. Therefore, Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claims 13-15

Claims 13-15 recites:

13. A work light according to claim 11 including an electronic circuit to prove a constant current to said LEDs independent of a supply voltage providing said current.

14. A work light according to claim 13 wherein said electronic circuit comprises a switching regulator.

15. A work light according to claim 14 wherein said electronic circuit includes a microcontroller to control said switching regulator.

Claims 13-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McDermott as applied to Claim 11 in further view of Selkee. *See* OA at 9, ¶19. The OA admits that McDermott “does not specifically teach an electronic circuit to provide a constant current to the LEDs independent of a supply voltage providing the current [re: Claim 13], wherein the circuit includes a microcontroller [re: Claim 155] that controls a switching regulator [re: 14].” *See* OA at 9, ¶ 19. Since claims 13-15 depend from claim 11, and McDermott does not disclose the element of “elliptical beam” of claim 11, McDermott also does not disclose this element of claims 13-15. The OA does not establish that Selkee discloses this element of an “elliptical beam.” Therefore, not all elements are disclosed by either of the cited references such that a *prima facie* case of obviousness is not established. Thus, Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claims 16-17 and 19

Claims 16-17 and 19 recite:

16. A work light according to claim 13 wherein said current is provided by a plurality of nickel-metal-hydride batteries.

17. A work light according to claim 13 wherein said batteries comprise eight AA batteries.

19. A work light according to claim 13 wherein said current is provided by a fuel cell.

Claims 16-17 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McDermott as applied to Claim 11 in further view of Selkee. *See* OA at 9, ¶19. The OA admits that McDermott “does not specifically teach the current being provided by a plurality of nickel-metal-hydride batteries [re: Claim 16], wherein said batteries being eight AA batteries [re: Claim 17]; nor teaches the current being provided by a fuel cell [re: Claim 19].” *See* OA at 10, ¶21. Since claims 16-17 and 19 depend from claim 13 which in turn depends from claim 11, and McDermott does not disclose the element of “elliptical beam” of claim 11, McDermott also does not disclose this element of claims 16-17 and 19. The OA does not establish that Selkee discloses this element of an “elliptical beam.” Therefore, not all elements are disclosed by either of the cited references such that a *prima facie* case of obviousness is not established. Thus, Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claims 18

Claim 18 recites, “A work light according to claim 13 wherein said current is controlled via a momentary action switch.”

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over McDermott as applied to claim 13 and in further view of Krietzman *et al.* (U.S. Publication 2002/0030994). *See* OA at 10, ¶22. The OA admits that McDermott “does not specifically teach the current being controlled via a momentary switch.” *See* OA at 11, ¶22. Since claim 18 depends from claim 13 which in turn depends from claim 11, and McDermott does not disclose the element of “elliptical beam” of claim 11, McDermott also does not disclose this element of claim 18. The OA does not establish that Krietzman discloses this element of an “elliptical beam.” Therefore, not all elements are disclosed by either of the cited references such that a *prima facie* case of obviousness is not established. Thus, Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claim 20

Claim 20 recites the following:

A work light comprising:

- (a) at least two LEDs tilted away from each other at an offset angle to provide, in use, a high intensity elliptical beam:

- (b) said LEDs being enclosed within a first portion of a housing,
- (c) eight NiMH-AA batteries enclosed within a second portion of said housing,
- (d) said first and second portions being interconnected by a flexible neck portion, and
- (e) an electronic circuit including a switching regulator and microcontroller connected to provide, in use, a constant current to said LEDs independent of the voltage supplied by said AA batteries.

Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Twardawski (U.S. Patent 2004/0141316) in view of Selkee and in further view of Stopa (U.S. Publication 2004/0155844.) *See* OA at 11, ¶24. More specifically, the OA cites Figure 3, items 30 and 34 of Twardawski as disclosing a lighting device including at “least two LEDs tilted away from each other at an offset angle to provide, in use, a high intensity elliptical beam.” *Id.* Applicants respectfully disagree because the cited references do not disclose every element of the claim. In fact, Twardawski teaches away from claim 20. In particular, the two LEDs of Twardawski form 2 beams of light, one that is circular and one that is “substantially elliptical,” rather than the two LEDs forming “a high intensity elliptical beam.” *See* Twardawski, Figures 8A-8C. This is further supported by ¶¶ 70, 74 and 76 of Twardawski, which states that the two LEDs form separate beams of light, neither of which are “a high intensity elliptical beam.” Further, the OA does not establish that either Stopa or Selkee disclose the element of “at least two LEDs tilted away from each other at an offset angle to provide, in use, a high intensity elliptical beam.” Therefore, the combination of references does not disclose all the elements of claim 20 such that a *prima facie* case of obviousness is not established. Thus, Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claims 24-26.

Claims 24-26 recite the following:

- 24. A work light according to claim 20 including a lens to modify the shape of said beam.
- 25. A work light according to claim 20 including a reflector to modify the shape of said beam.

26. A work light according to claim 20 wherein the shape of said beam may be modified by changing the angle of said LEDs to each other.

Claims 24-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Twardawski in view of Selkee and in further view of Stopa. See OA at 13, ¶¶ 25-27. Applicants respectfully disagree. Since claims 24-26 depend from claim 20, in the same way that the element of “at least two LEDs tilted away from each other at an offset angle to provide, in use, a high intensity elliptical beam” is not disclosed by Twardawski, it is also not disclosed for claims 24-26. Further, neither Selkee or Stopa is stated by the OA to disclose this element, therefore, not all elements of the claims are disclosed by the cited references. Thus, a *prima facie* case of obviousness is not established whereby Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claims 21-22.

Claims 21-22 recite the following:

21. A work light according to claim 20 including a said microcontroller and a momentary action switch to control said regulator.

22. A work light according to claim 20 wherein said microcontroller and a momentary action switch control the intensity of said beam.

Claims 21-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Twardawski in view of Selkee and Stopa as applied to claim 20 and in further view of Rachwal (U.S. Patent 6,140,776). See OA at 13, ¶28. Since claims 21 and 22 depend from claim 20 in the same way that the element of “at least two LEDs tilted away from each other at an offset angle to provide, in use, a high intensity elliptical beam” is not disclosed by Twardawski, it is also not disclosed for claims 21 and 22. Further, neither Selkee, Stopa, or Rachwal is stated by the OA to disclose this element, therefore, not all elements of the claims are disclosed by the cited references. Thus, a *prima facie* case of obviousness is not established whereby Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

Claims 23

Claim 23 recites the following, “A work light according to claim 20 including a sensing circuit to prevent complete discharge of said batteries.”

Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Twardawski in view of Selkee and Stopa as applied to claim 20 and in further view of Collins (U.S. Patent 4,342,953). *See* OA at 14, ¶29. Since claim 23 depends from claim 20 in the same way that the element of “at least two LEDs tilted away from each other at an offset angle to provide, in use, a high intensity elliptical beam” is not disclosed by Twardawski, it is also not disclosed for claim 23. Further, neither Selkee, Stopa, or Rachwal is stated by the OA to disclose this element, therefore, not all elements of the claims are disclosed by the cited references. Thus, a *prima facie* case of obviousness is not established whereby Applicants respectfully request that this rejection be withdrawn, placing these claims in condition for allowance.

CONCLUSION

On the basis of the above remarks, reconsideration and allowance of the claims is believed to be warranted and such action is respectfully requested. If the Examiner has any questions or comments, the Examiner is respectfully requested to contact the undersigned at the number listed below.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number 7038532001.

Respectfully submitted,
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